

## NECROPSY KIT

Contents:     2 large and 2 small Whirl-Pak bags  
                  1 large bottle of 10% formalin  
                  SV43 form in a Whirl-Pak bag

This kit is designed to be used for routine postmortem collection of tissues for diseases other than abortions and neonatal diarrheas. Specific kits are available for these two syndromes.

All postmortem examinations should be completed as soon as possible after the animal's death. **The most common error is to have a preconceived diagnosis and only collect tissues to confirm a specific disease.** Try to approach each case with an open mind as to differential diagnoses. It is also an error to collect only tissues that appear grossly abnormal. Many lesions are microscopic and may appear grossly as normal tissue.

Do not be concerned with what tests to request, unless you have something specific in mind. The pathologist in charge of the case can make these selections based on the history, clinical observations and gross pathology.

While the pathologist will attempt to indicate the significance of each test performed, the final interpretation and diagnosis most often rests with the submitting veterinarian.

**FRESH TISSUES:** These may be placed in Whirl Pak bag or other suitable nonporous containers. With the exceptions noted later, the tissues should be in approximately 2-3 inch cubes. They should be packed with frozen gel foam packs.

**FIXED TISSUES:** Tissue should be in approximately ½ inch slices or cubes and placed immediately in 10% formalin, at least 10 times the volume of tissue. This concentration of formalin is prepared as follows:

37% - 40% formalin – 100ml  
tap water – 900ml

**For submitting and fixing the brain, a different procedure is advisable.** If rabies is a possible diagnosis, it is essential that fresh brain, **including intact brain stem**, and cerebellum be submitted (in a refrigerated state). For TSE (transmissible spongiform encephalopathy) follow the protocol required by the Animal Health Division of the Department of Livestock or USDA APHIS. For other neurologic disorders, see the reverse side of this sheet.

## FOR COLLECTION OF TISSUES, IT IS CONVENIENT TO CONSIDER THE FOLLOWING CATEGORIES

### SUDDEN DEATH (No clinical signs observed)

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| 1. <u>Fresh Tissues</u>              | 2. <u>Fixed Tissues</u>           |
| a. liver – 1 lb                      | a. lung                           |
| b. kidney – 1 whole                  | b. liver                          |
| c. brain                             | c. kidney                         |
| d. stomach (or rumen) contents 1 lb. | d. spleen                         |
| e. spleen                            | e. ileum – 1-inch segment         |
| f. lung                              | f. colon – 1-inch segment         |
|                                      | g. myocardium                     |
|                                      | h. brain – representative regions |

### RESPIRATORY DISEASES

- |                         |                         |               |
|-------------------------|-------------------------|---------------|
| 1. <u>Fresh Tissues</u> | 2. <u>Fixed Tissues</u> |               |
| a. lung                 | a. lung                 | e. turbinates |
| b. trachea              | b. bronchial lymph node | f. liver      |
| c. bronchial lymph node | c. trachea              | g. lung       |
|                         | d. myocardium           | h. spleen     |

### CENTRAL NERVOUS SYSTEM DISEASES (other than rabies & tse)

**Note: Rabies testing minimally requires complete transverse section of brain stem and portions of left and right cerebellum.**

- |                                     |                           |            |
|-------------------------------------|---------------------------|------------|
| 1. <u>Fresh Tissues</u>             | 2. <u>Fixed Tissues</u>   |            |
| a. brain                            | a. brain – spinal cord    | e. jejunum |
| b. Gasserian ganglion – bovine      | b. kidney                 | f. liver   |
| c. spleen                           | c. pancreas               | g. lung    |
| d. kidney – 1 whole                 | d. ileum – 1-inch segment | h. spleen  |
| e. stomach or rumen contents – 1 lb |                           |            |
| f. spinal cord                      |                           |            |

### GASTROINTESTINAL DISEASES (other than neonatal diarrhea)

- |                                   |                           |
|-----------------------------------|---------------------------|
| 1. <u>Fresh Tissues</u>           |                           |
| a. ileum – 2-inch segment         | d. spleen                 |
| b. rectal contents – 20ml         | e. lung                   |
| c. mesenteric lymph node          |                           |
| 2. <u>Fixed Tissues</u>           |                           |
| a. tongue                         | h. colon – 1-inch segment |
| b. esophagus                      | i. pancreas               |
| c. stomach or abomasum            | j. liver                  |
| d. rumen                          | k. kidney                 |
| e. duodenum – 1-inch open segment | l. spleen                 |
| f. jejunum – 1-inch open segment  | m. lung                   |
| g. ileum – 1-inch open segment    |                           |

### ADDENDUM

1. If the animal is alive and will be sacrificed, a serum sample and EDTA blood sample are helpful.
2. When in doubt, contact the laboratory at **406/994-4885**.

Revised 2006